



# United States Department of the Interior



U. S. FISH AND WILDLIFE SERVICE  
Benton Lake National Wildlife Refuge  
922 Bootlegger Trail  
Great Falls, Montana 59404-6133

September 14, 2007

NWRS/BL/PU 5  
Mail Stop 61510

## Memorandum

**To:** Thomas Roffe, Chief Wildlife Health, R6, FWS, Bozeman, MT

**From:** Vanessa Fields, Wildlife Biologist, Benton Lake NWR

**Subject:** Chronic Wasting Disease (CWD) Accomplishment Report, FY-2007

## Background

The Benton Lake Complex encompasses 20,000 square miles along the western edge of the northern Great Plains in north central Montana. The Complex includes the Benton Lake National Wildlife Refuge, located 12 miles north of Great Falls, and 22 Waterfowl Production Areas (WPAs) located throughout a 10 county Wetland Management District (WMD). The refuge is 12,383 total acres including 6700 acres of mixed-grass prairie and 5600 acres of wetlands. The total deer population (mule and white-tailed deer) on the refuge, which is closed to big game hunting, is less than 100 animals. An occasional elk is seen on the refuge.

The Benton Lake complex has a relatively low to moderate risk of significant Chronic Wasting Disease (CWD). This assessment is based on relatively low numbers of deer on the refuge and WPAs that are free to move on and off Service lands. There have been no relocations of elk or deer on or near Service lands in the last 5 years. The only confirmed case of CWD in Montana was found in a captive elk herd near Philipsburg (Montana Dept. of Livestock 2004), which is approximately 50 miles from the Powell County WPAs. The closest game farm to the refuge is 25 miles.

Our CWD planning and management goals and objectives for Benton Lake complex include:

*Management Goal:* In collaboration with Montana Department of Fish, Wildlife and Parks, prevent the establishment of CWD in wild cervids that use the Refuge or WPAs

*Surveillance Goal:* Early detection of CWD to increase the probability of

eliminating or controlling the spread of the disease.

*Surveillance Objectives:* To determine the status of CWD in deer and elk on the Refuge and in the WMD and estimate the likelihood that CWD is absent.

### ***Methods***

Regular surveillance is conducted for CWD on the refuge. Refuge staff drive an established monitoring route 1-2 times per week to look for any deer or elk that exhibit symptoms of CWD (emaciation, drooling, staggering) or carcasses that could be submitted for sampling. The date, start time, and weather conditions are recorded before each route. The number and species of all ungulates observed during the route are recorded, as well as their general condition.

Due to the remote location of many Service lands within the Wetland Management District, staff conduct opportunistic surveillance for sick or dead ungulates in conjunction with other job related visits to these units.

If deer or elk are observed exhibiting clinical signs consistent with CWD (emaciation, drooling, staggering, indifferent to surroundings) these animals will be collected and the heads removed and submitted to the MTFWP lab in Bozeman or the diagnostic lab at Colorado State University (CSU). If freshly dead animals are located, the heads from these animals are collected and submitted to the Bozeman or CSU lab as well. Collection methods and safety measures were described in the CWD Plan for Benton Lake Complex (USFWS 2004).

### ***FY 2007 Surveillance Results***

During FY2007, there were 345 white-tailed deer and 58 mule deer observations on the refuge (Figure 1). All of the animals appeared to be healthy and did not exhibit any symptoms of CWD. In addition, no deer or elk have been seen exhibiting symptoms of CWD through opportunistic observations by refuge staff. Winter weather and snow drifts along the surveillance route made it impossible to run the route several weeks during January and February. WMD staff have not observed any deer or elk with clinical signs consistent with CWD during routine work on the district this year.

In FY2007, two hunter-killed elk from the Blackfoot Valley and one road-killed mule deer from Benton Lake refuge were submitted for CWD testing to Colorado State University. The results were all negative.

### ***Discussion***

A database was created to record all of the surveillance observations and specimens collected. GIS layers have been created from these datasets. Copies of the database have been submitted with this report and will be submitted to the state of Montana at the end

of the fiscal year.

Montana Fish, Wildlife and Parks finalized their CWD plan in June 2006. (MTFWP 2006). Following internal review of the draft EA and review of the public comments received by the department, MTFWP has selected a management plan that incorporates elements of two alternatives from the draft CWD Management Plan. If CWD is detected in Montana, the final decision on specific management of CWD at the diagnosed epicenter will be made by an epidemiologic team (epi-team) and based on the variables that the situation presents. Management will be initiated through the radio collaring of 50 animals and a determination of the home range of that set of animals through monitoring by radio-telemetry for 6-9 months. During that initial time period, the epi-team will use all on the ground information available to select a management action that best fits the situation. The epi-team will also develop any mitigation measures at that time necessary to reduce effects of the management plan on the environment. We will continue to coordinate with MTFWP to assist and coordinate in the implementation of the final plan. Our contact in the local MTFWP office is Cory Loecker.

Refuge and WMD staff that interact with hunters are prepared to provide information about Refuge surveillance goals, the status of CWD in Montana, facts concerning CWD transmission, and the potential risk involved.

#### ***Project Funding Summary for FY2007***

<b>Costs</b>	<b>Total</b>
Staff time (salaries)	\$4,570
Fuel	\$333
CWD sample kits (re-stock & creating additional)	\$0
CWD testing (shipping and analysis)	\$400
Total	\$5,303

#### **References**

Montana Department of Livestock. 2004. CWD information from Montana Department of Livestock. [URL:http://www.liv.state.mt.us](http://www.liv.state.mt.us).

Montana Fish, Wildlife and Parks. 2006. Decision Notice: Chronic Wasting Disease Management Plan for Free Ranging Wildlife in Montana. Helena, MT. 16pp.

Montana Fish, Wildlife and Parks. 2005. Chronic Wasting Disease Management Plan for Free-ranging Wildlife in Montana. Helena, MT. 89p

U.S. Fish and Wildlife Service. 2004. Chronic Wasting Disease Surveillance and Monitoring Plan for Benton Lake National Wildlife Refuge Complex. 16

cc: Gary Sullivan, Robert Johnson

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Figure 1. Chronic Wasting Disease Surveillance:  
Total deer observations FY2007

